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# Oral Health Program 2009 Annual Report



Missouri Department of Health and Senior Services



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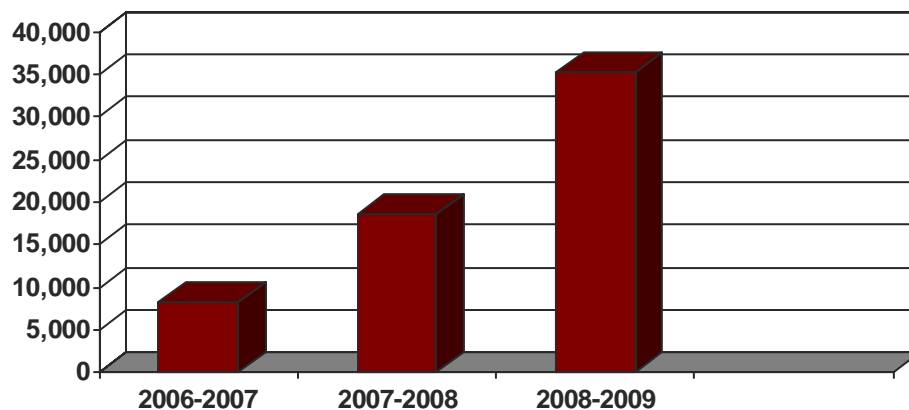
## Oral Health Program

The Oral Health Program focuses on monitoring and reducing oral disease among Missouri citizens, particularly youth, due to the funding stream through Maternal Child Health Block Grant (MCH-B). Preventive efforts include the Fluoride Mouth Rinse Program that helps to reduce cavities in school-age children; the Public Water Fluoridation Program that monitors and supports fluoridation of public drinking water systems; and the Missouri Oral Health Preventive Services Program (PSP) that provides oral health screening, preventive services including fluoride varnish applications and oral health education with dental hygiene materials (such as toothbrushes, toothpaste and dental floss) and referral networks. The Missouri PSP is available to children attending Early Childhood Learning Centers, Early Head Start and Head Start, as well as school children in participating communities including Schools for Developmentally Disabled.

### *Preventive Services Program*

The Preventive Services Program began in 2005 as a result of a Health Resources Service Administration State Collaborative Grant. Since that time the number of children and communities participating in PSP has steadily grown. In 2006-2007 the program served 8,259 children, in 2007-2008 18,656 children and in the most recent school year (2008-2009), 35,308 children received the benefits of the program. (See Graph 1)

Graph 1. PSP Participants for the Past Three Years

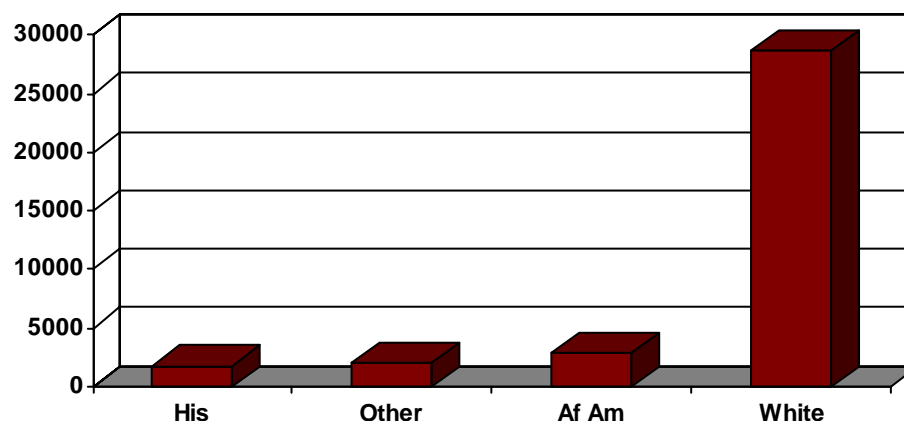


This program has grown as a result of interested communities assuming the responsibility for the oral health of its children. Each community is assisted by an Oral Health Consultant, a part-time dental hygienist, hired by the Department to provide guidance and supplies. Communication with communities takes place via phone calls, personal visits and through internet engagement. The program utilizes a stand-alone Web site, [www.mohealthysmiles.com](http://www.mohealthysmiles.com) to communicate its message and on-line training for volunteers. This Web site receives an average of 33 hits daily.

Seventy-nine percent of Missouri counties participated in PSP during the 2008-2009 school year. Exhibit 1 on page 9 provides a graphic display of state-wide participation. Jackson, Lafayette, Greene, Washington and Cape Girardeau counties are to be commended for high numbers of participants (>1000). The participation of dental professionals and school personnel is key to making PSP active in a community. Often areas lacking participation are associated with regions that lack dental professionals to conduct the oral health screenings. These gaps in participation are particularly notable in the northern regions of the state.

Participants in PSP are predominantly white, although multiple race groups are represented as displayed in Graph 2.

Graph 2. Race of PSP Participants.



PSP is designed for children of all ages and abilities. All ages benefit from oral screenings, education and referrals. Additionally, the fluoride varnish application is an intervention recommended for all ages and abilities (ASTDD). Table 1 displays the ages and groups participating in PSP.

Table 1. Ages and Groups Participating in PSP School Year 2008-2009

K and Pre-School	Head Start and Early Head Start	Grades 1-5	Grades 6-12	Schools for Severely Disabled
5,591	4,606	20,079	4,564	335

The most recent data collected as part of PSP's surveillance component indicates that 6 percent of Missouri's children have urgent dental treatment needs. Urgent care is defined as a child with pain or acute infection so severe that he or she is unable to play or concentrate at school. Furthermore, a trend in the descriptive data indicates that between 9 and 10 percent of Missouri's children can be described as having had rampant decay (seven or more areas of treated or untreated decay). Table 2 displays some of the PSP data.

Table 2. Descriptive PSP Statistics for Treated, Untreated and Rampant Decay and Presence of Dental Sealants

Condition	2006-2007	2007-2008	2008-2009
Treated Decay	26.5% (n=8,198)	29.6% (n=18,538)	32% (n=34,798)
Untreated Decay	33.3% (n=8,230)	31.3 % (n=18,590)	29% (n=34,820)
History of Rampant Decay (7 or more areas of treated or untreated decay)	10% (n=8,191)	10.5% (n=18,554)	9% (n=34,534)
Dental Sealants Present	8% (n=8,195)	15% (n=18,521)	15% (n=34,550)

Note: These numbers are meant for descriptive information only and cannot be used in comparison of one year to the next. However, general trends can be assumed.

PSP surveillance data reveal the oral hygiene status of the children screened. Seventy-seven percent presented with oral hygiene that was rated as satisfactory. Satisfactory was defined as teeth that displayed no obvious signs of debris. The remaining 23 percent of the PSP participants were evaluated as having unsatisfactory oral hygiene home care habits. This emphasizes the value of the oral health education component of PSP.

The PSP surveillance data also revealed that the presence of dental sealants has increased. Dental sealants are a preventive measure that the Missouri Foundation of Health has funded for several years; however, this funding is coming to a close and the need to explore opportunities is present. A Dental Sealant Seminar was conducted August 27-28, 2009, in Columbia, Missouri. This seminar co-sponsored by DHSS along with University of Missouri-Kansas City School of Dentistry and Missouri Foundation for Health will bring together stakeholders to discuss opportunities to increase the presence of dental sealants in our school children.

In addition to oral health surveillance, the PSP screenings provide an opportunity to record height and weight statistics of those children screened and to calculate the Body Mass Index (BMI). Of the 35,308 children screened, height and weight data was included and BMI calculated for 4,667. The data indicate 56 percent of the children were within the 5<sup>th</sup> percentile - < 85<sup>th</sup> percentile or considered of healthy weight; however, 17 percent were within the 85<sup>th</sup> - < 95<sup>th</sup> percentile or overweight and 22 percent were within the  $\geq$  percentile or obese (see Table 3).

Table 3. Descriptive Data of BMI

Underweight	Healthy Weight	Overweight	Obese
<i>(Less than 5th percentile)</i>	<i>(5th percentile - &lt; 85th percentile)</i>	<i>(85th - &lt; 95th percentile)</i>	<i>(<math>\geq</math> 95th percentile)</i>
4%	56%	17%	22%

Note: These screenings were not randomly selected and the data is only representative of those children that were screened during PSP and data obtained.

### ***Oral Health Surveillance System***

In addition to the PSP screenings, every five years the Oral Health Program conducts 3<sup>rd</sup> grade oral health screenings as a MCH-B grant performance measure. These screenings are conducted in randomly selected elementary schools for 3<sup>rd</sup> grade children with a convenience sample of 6<sup>th</sup> grade children as well as the Schools for Developmentally Disabled. Information from the 2004-2005 screening can be found at [www.dhss.mo.gov/oralhealth/OralHealthSurv.html](http://www.dhss.mo.gov/oralhealth/OralHealthSurv.html). In 2009-2010 this screening will be conducted and analysis of the results provided on the Oral Health Program's Web site. Currently, randomly selected elementary schools are being contacted for participation.

### ***Fluoride Mouth Rinse Program***

In the 2007-2008 school year, the Fluoride Mouth Rinse Program served 76,110 school children in the participating 317 schools. In the 2008-2009 school year, 60,397 children received fluoride mouth rinse in 270 schools. With 2009-2010 school year to be the final school year this program will be offered, 42-45 schools are planning their transitioning into PSP.

This transition is necessary due to the applicability of fluoride varnish to multiple age groups. Mouth rinsing calls for a greater level of dexterity and thus made the fluoride mouth rinse unsuitable for small children and the disabled. Also, the fluoride mouth rinse program does not include surveillance, education or referral components.

### ***Clinical Services***

Clinical service efforts include the Missouri Donated Dental Services Program through the National Foundation of Dentistry for the Handicapped which utilizes volunteer dentists and participating laboratories. Services are available at no charge to the eligible patients who have physical, medical or mental disabilities or who are elderly in need of comprehensive oral health care rather than routine dental care. Demand for this program has increased greatly due to the elimination of MO HealthNet adult dental services and the current economy. Table 4 reflects the number of cases completed and remaining active at the end of the specified period.

Table 4. Completed and Active Cases-Missouri Donated Dental Services

Period	Cases Completed	Cases Active
9/1/05-8/31/06	82	104
9/1/06-8/31/07	165	120
9/1/07-6/30/08	129	110
7/1/08-9/30/08	39	121
10/1/08-12/31/08	81	145
1/1/09-3/31/09	118	196

Due to the demand for services, the Donated Dental Services Program's waiting list quickly increased to 1,017 Missourians needing dental care. The waiting list is county specific and was closed in June 2008 to allow for processing of applicants on the waiting list. In 2008, the Missouri coordinator's position was changed from a part-time position to a full-time position to assist in decreasing the waiting list to allow it to be reopened in the closed counties. However, the demand for the Donated Dental Services Program is greater than the resources available and the waiting list continues to exist across multiple counties. Collaboratively, funding for this program is provided by the Division of Senior and Disability Services and the Department of Social Services.



### ***Educational and Outreach Services***

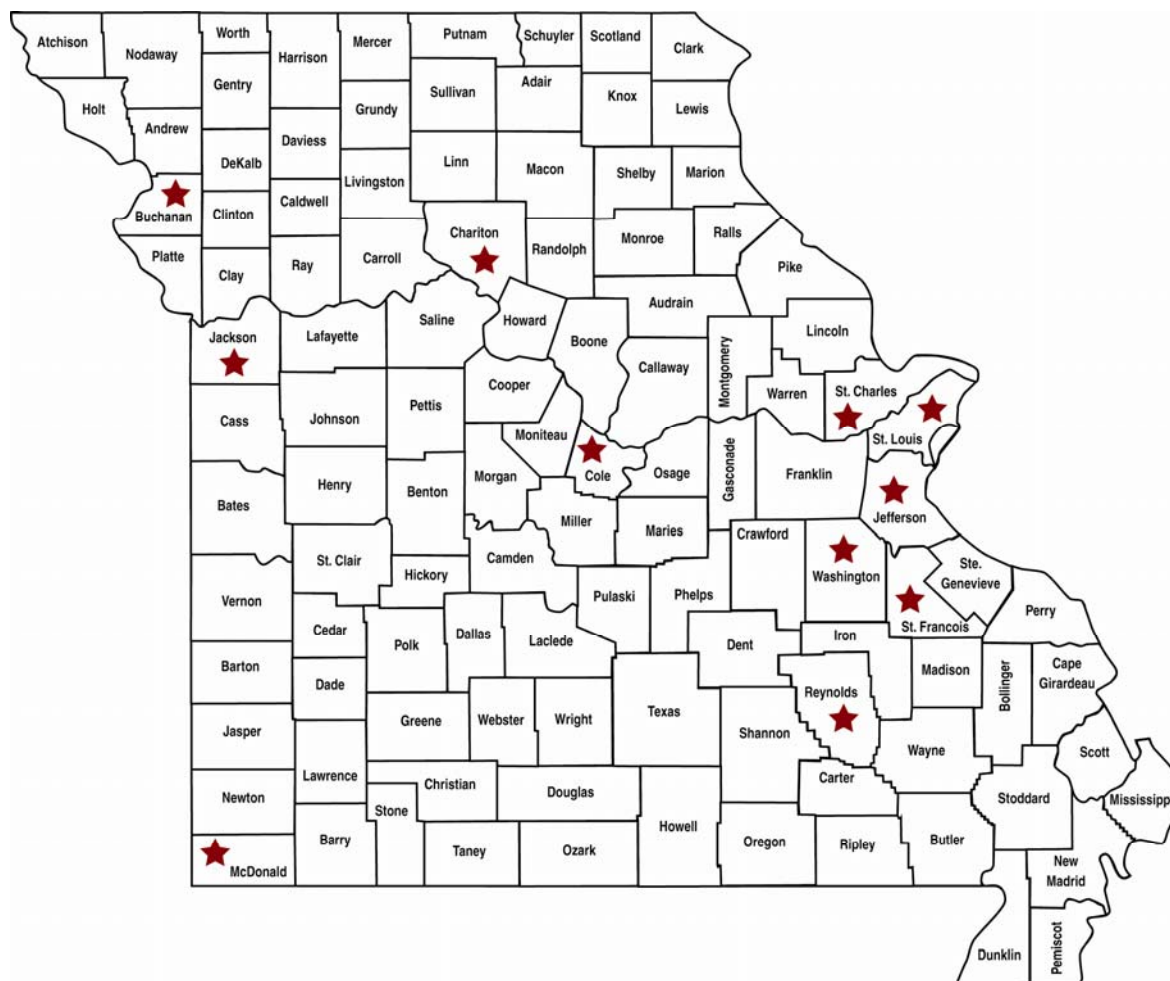
Education and outreach services include the Portable Dental Equipment Program. This program provides equipment for dental hygienists and dentists who conduct community oral health outreach and educational activities such as dental sealant programs. Outreach services also include providing a variety of oral health education resources and materials for local oral health education programs.

Designated local public health agencies and dental clinics in various parts of the state act as repositories for the portable dental equipment and are responsible for loaning the equipment for outreach and receiving back the equipment as well as reporting on the utilization of the equipment. In addition, the equipment is available through the department warehouse. The portable dental equipment set consists of patient chair, dentist stool, light, air-compressor and portable dental unit.

The following map reflects in what parts of the state the repositories are located. More information regarding the repositories and the equipment can be found on the department's Web site at [www.dhss.mo.gov/oralhealth/PortableDentalEquip.html](http://www.dhss.mo.gov/oralhealth/PortableDentalEquip.html).



## Portable Dental Equipment Locations, Missouri 2009



The Oral Health Program works with the repositories through a memorandum of understanding (MOU) to ensure the equipment is available for outreach. Currently, the equipment is aged and one of the goals of the program is to replace the dental equipment with reliable portable dental equipment. One provision of the MOU is for the repositories to provide utilization data. Historically, this statistic has been difficult to gather; however, this statistic is needed to justify replacement of equipment.

Table 5 reflects the most current utilization data provided. As this data points out, there are several sites that report no utilization. In addition, especially in eastern Missouri, the repositories are relatively close in proximity. There are other parts of the state where no repository is located. The Oral Health Program is in the process of exploring opportunities to relocate the equipment from areas of no utilization to communities that may better utilize the equipment.



Table 5. Portable Dental Equipment Utilization

Repository	Total # of Dental Sealant Placed	Total # of Patients Treated	Total # of Fluoride Treatments	No Report	Did not use Equipment	Other Services Provided
Area Community Health Dental Clinic				X		
Chariton County Health Center	130	660	0			Screenings for Chariton County Schools.
Crider Health Center	0	0	0		X	
Jefferson County Health Department				X		
John C. Murphy Health Center	0	0	0		X	
Northwest Dental Services				X		
Reynolds County Health Center	0	1,565	1,565			Urgent Care
St. Francois County Health Center	0	0	0		X	
Swope Health Services	0	471	216			Exams, X-rays, Prophylaxis, Restorations
Washington County Health Department				X		
<b>TOTALS</b>	130	2,696	1,781			

Oral Health Program continues to receive positive feedback from users of the Kindergarten-12<sup>th</sup> Grade Oral Health Education Curriculum. The curriculum was developed by the Oral Health Program and is available in both English and Spanish on the department's Web site at [www.dhss.mo.gov/oralhealth/index.html](http://www.dhss.mo.gov/oralhealth/index.html). These PowerPoint presentations can be used by school health nurses or teachers and other health care/child care professionals in conjunction with their health curriculum. Positive feedback has been received from numerous Missouri schools using the presentations in conjunction with their curriculum. Within the United States, in 2008 the presentations were adapted by the Native American Professional Parent Resources (NAPPR), Inc. for their population and are also available on NAPPR's Web site. In addition, many state oral health programs, oral health professionals and associations have requested to utilize all or portions of the presentations. Outside of the United States, positive feedback has been received from Qatar, Marshall Islands and the University of Sulaimnani-Kurdistan Region-Iraq.

### ***Public Water Fluoridation***

The Oral Health Program supports and promotes public water fluoridation as a preventive measure. Public water fluoridation is supported by the Centers for Disease Control and Prevention (CDC), American Dental Association and the Association for State and Territorial Dental Directors.

The Oral Health Program strives to maintain its Web site with current water fluoridation status of public water systems as well as collaborate with CDC to update CDC's Water Fluoridation Reporting System (WFRS). The Oral Health Program's Web site at [www.dhss.mo.gov/oralhealth/waterfluoridation\\_map.html](http://www.dhss.mo.gov/oralhealth/waterfluoridation_map.html) was updated on July 18, 2009, with 2008 data from the Department of Natural Resources. Exhibit 2 on page 10 is an updated map reflecting fluoridated water systems/districts in Missouri in 2009. The Oral Health Program is working with CDC to update WFRS.



### ***Activities Associated with HRSA Grant-State Oral Health Taskforce and Assessment***

In 2008 the Oral Health Program received a grant from the Health Resources and Service Administration to address the fundamental oral health concerns in Missouri. The first-ever statewide oral health assessment of adults across income, age and racial demographics was conducted in April through June 2009. Target populations included senior, uninsured and underinsured elderly adults at the following settings: skilled nursing homes, senior centers, homeless shelters and community health centers. Data from approximately 2,000 participants will be analyzed to help ascertain the true burden of oral health disease for the adult population across the state.

In addition to the assessment, the grant allowed for the creation of a statewide Oral Health Task Force to identify Missouri's most critical oral health needs and determine strategies for improvement. The 40-member task force included representatives from oral health professionals in the public and private sectors, dental schools, local public health agencies, medical providers, oral health coalitions, community health centers, and agencies which work with community water fluoridation and special populations like the disabled, elderly and homeless. Meeting each month for five months, the Oral Health Task Force identified four key focus areas for oral health in Missouri: Education and Community Awareness; Access to Care, Workforce and Training; and Public Policy. The statewide oral health plan is now being drafted and will be published by the fall of 2009. This plan will also be available on the Oral Health Program's Web site.

### ***Networking and Coalition Activity***

The Oral Health Program networks with multiple agencies both inside and outside of the Missouri Department of Health and Senior Services. Participation in oral health coalitions is another way this program helps to facilitate a comprehensive statewide oral health prevention and education system and to ensure access to dental care. A representative from the Oral Health Program serves on the Missouri Coalition for Oral Health Board of Directors providing input and direction along with other representatives from private and public sector.

The annual Missouri Coalition for Oral Health Summit, which the Oral Health Program supports, brings together oral health stakeholders including:

- oral health care professionals
- other health care professionals such as pediatricians, primary care physicians and nurse practitioners
- Head Start agencies
- school health nurses
- community clinics
- local public health agencies
- oral health associations
- department oral health policy makers

These summits facilitate collaboration and provide oral health expert professional speakers that address current oral health issues and solutions. This year's summit will be held on November 13, 2009, in Columbia, Missouri.

Exhibit 1: PSP Participants by County

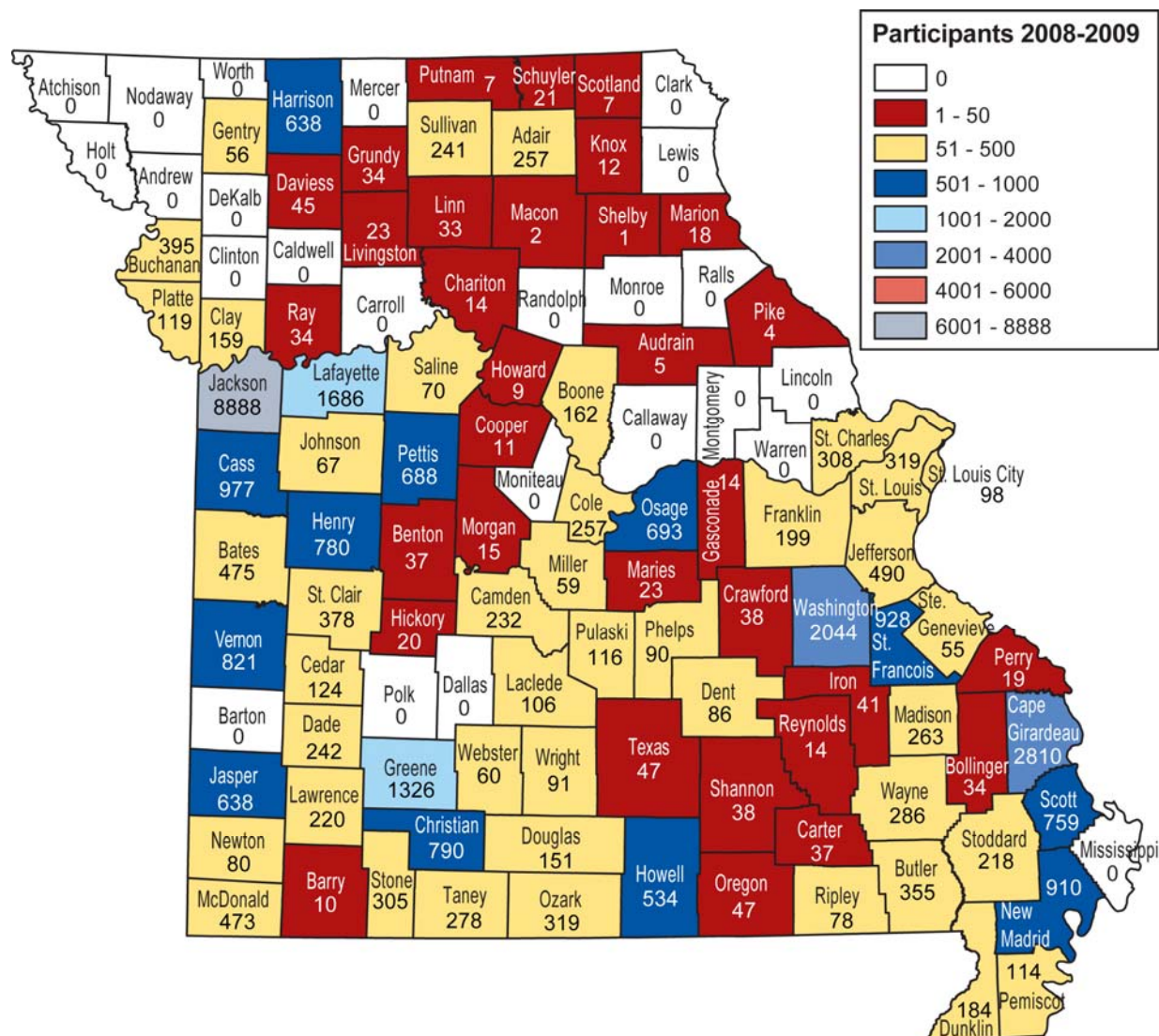


Exhibit 2: Fluoridated Water Systems/Districts in Missouri

